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FIG. 1 (PRIOR ART)

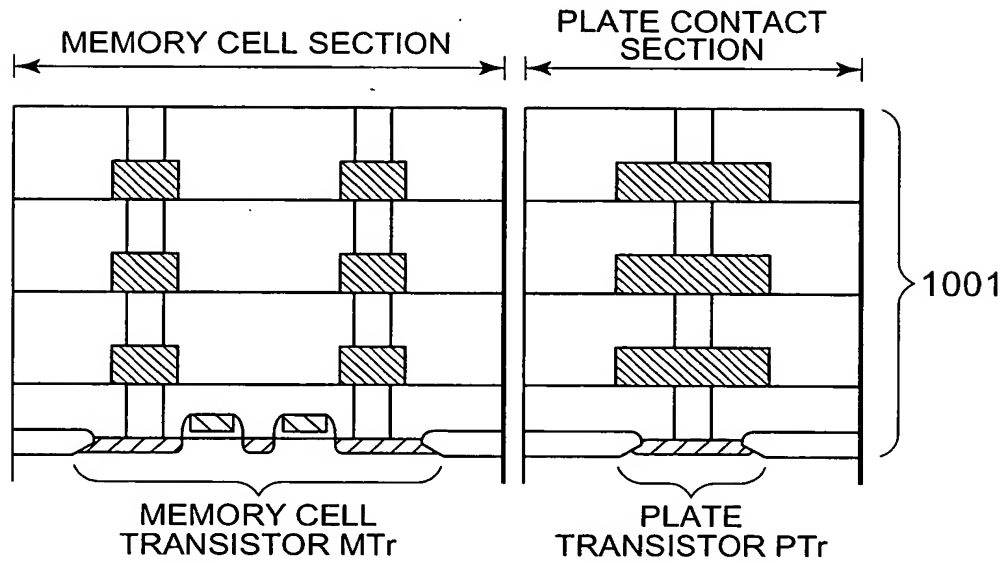
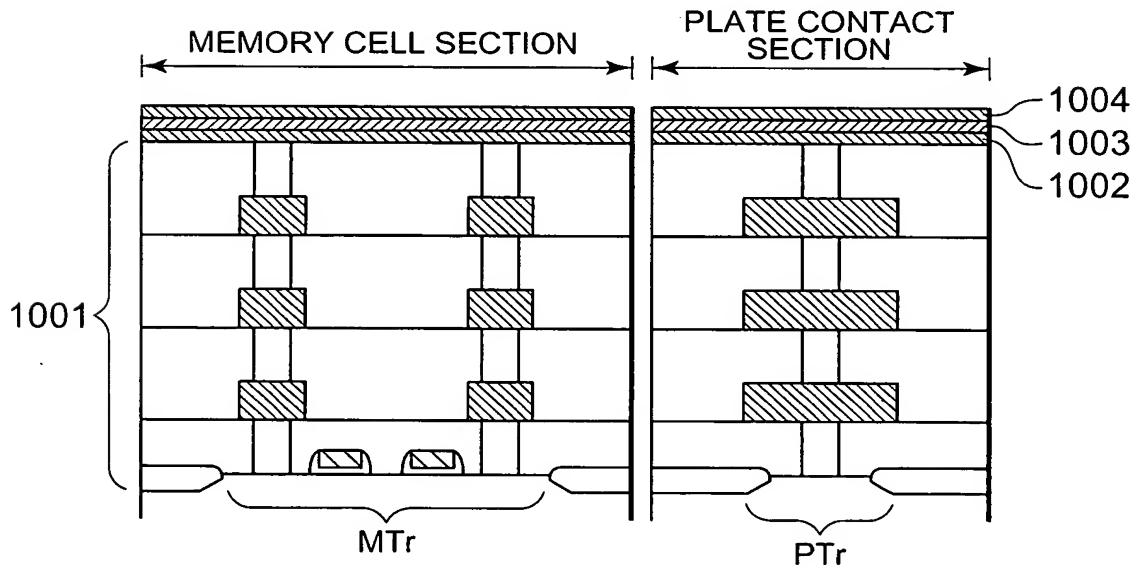


FIG. 2 (PRIOR ART)



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FIG. 3 (PRIOR ART)

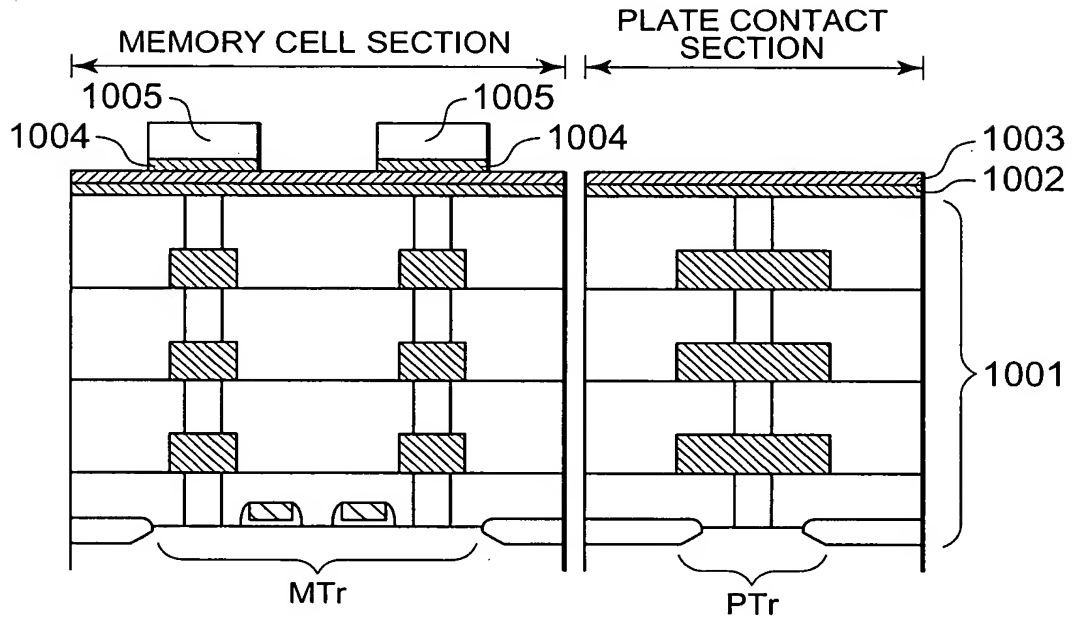
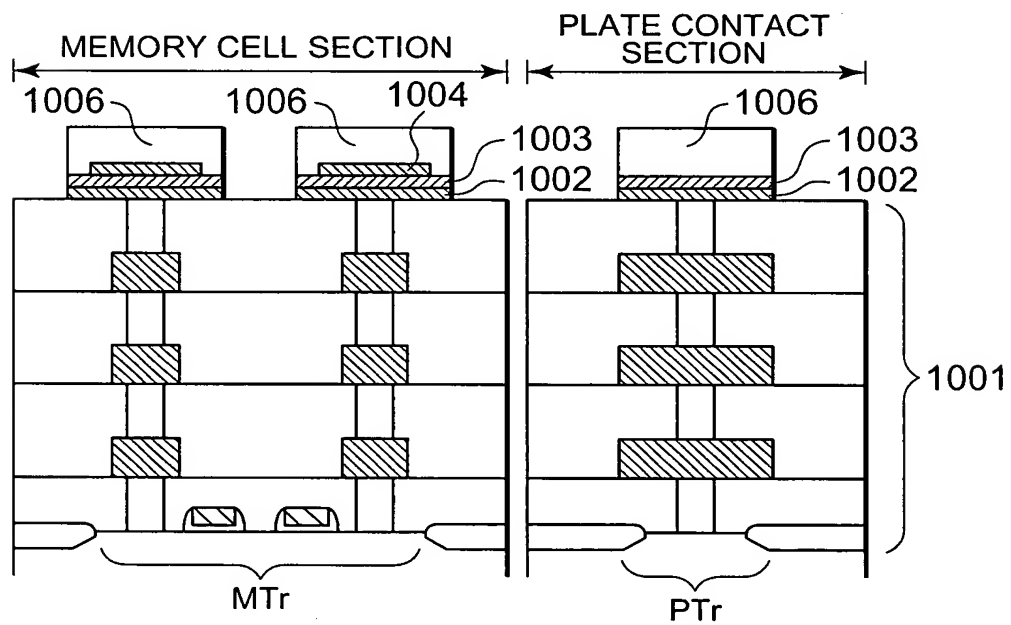


FIG. 4 (PRIOR ART)



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FIG. 5 (PRIOR ART)

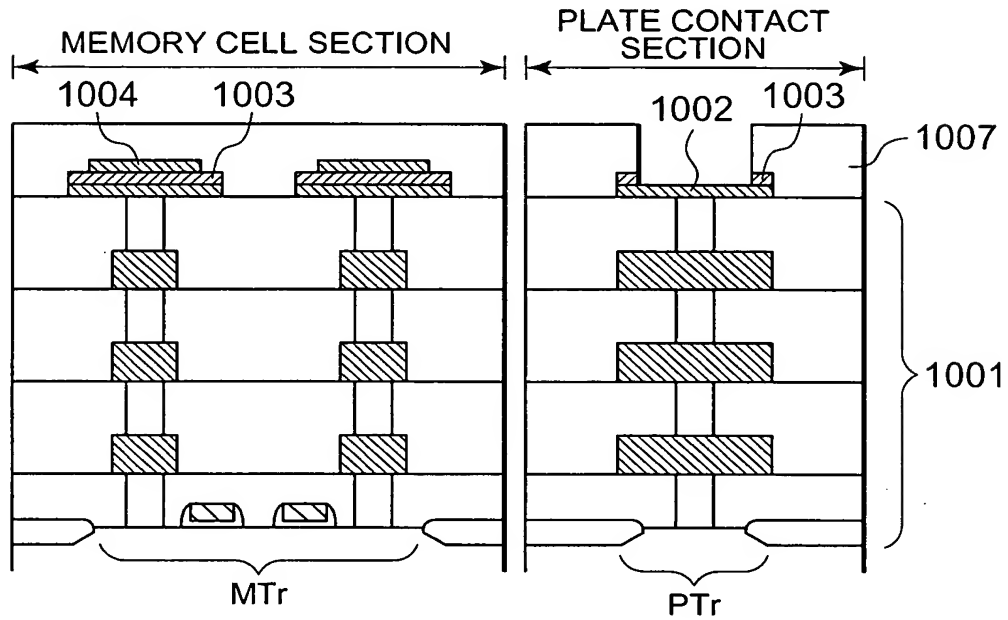
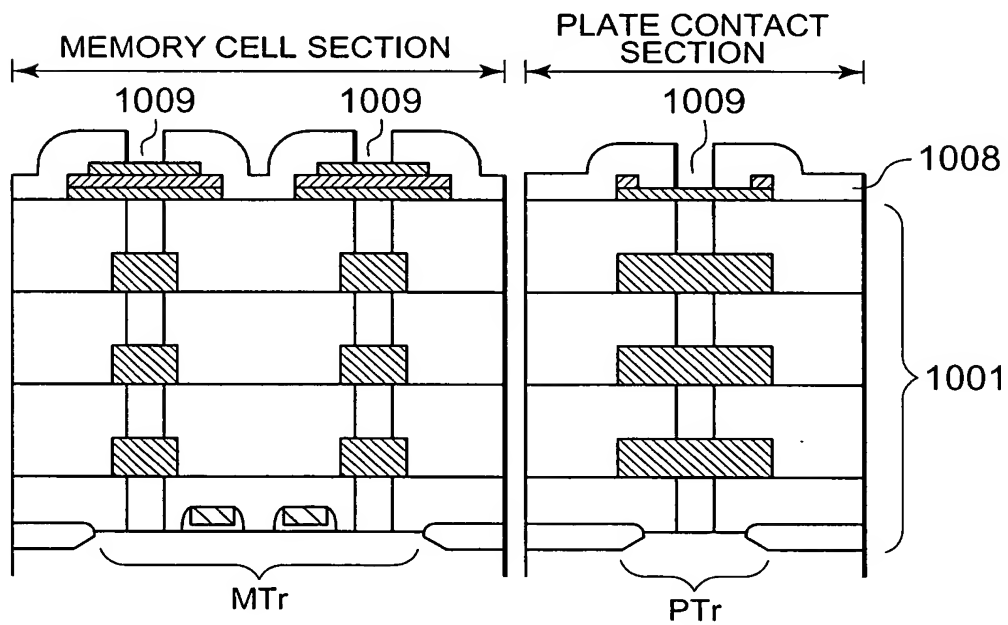


FIG. 6 (PRIOR ART)



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FIG. 7 (PRIOR ART)

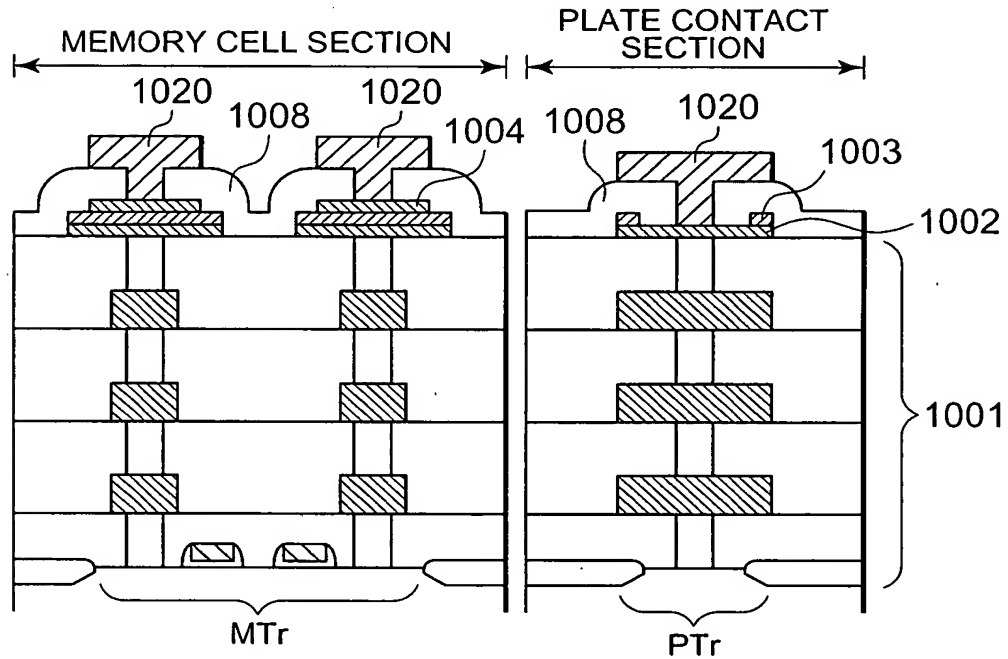
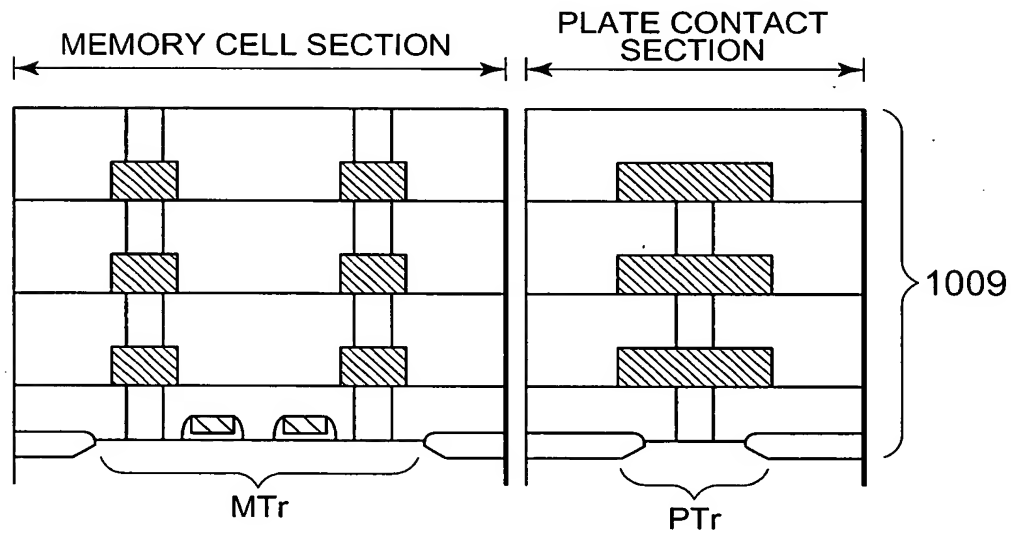


FIG. 8 (PRIOR ART)



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FIG. 9 (PRIOR ART)

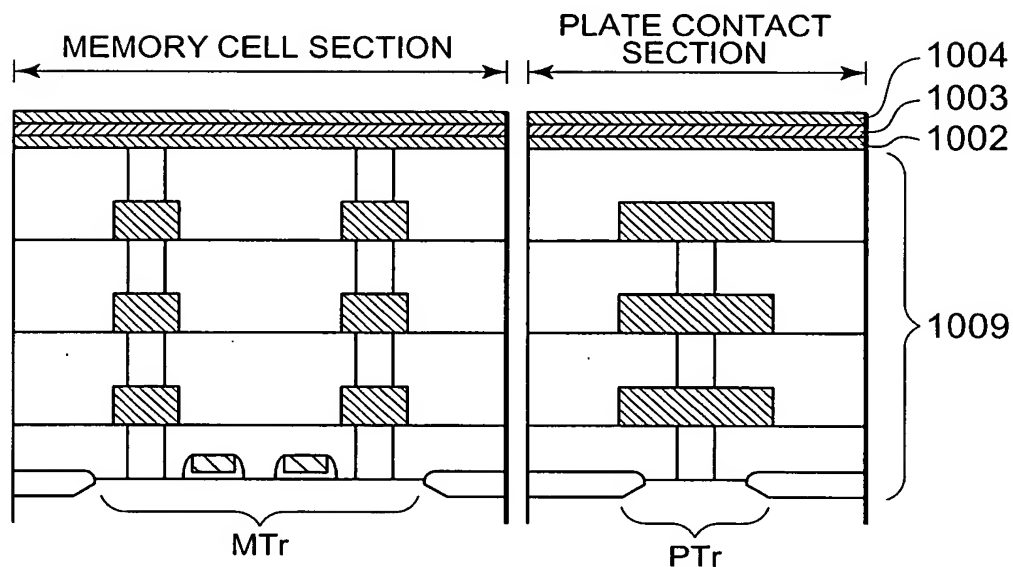
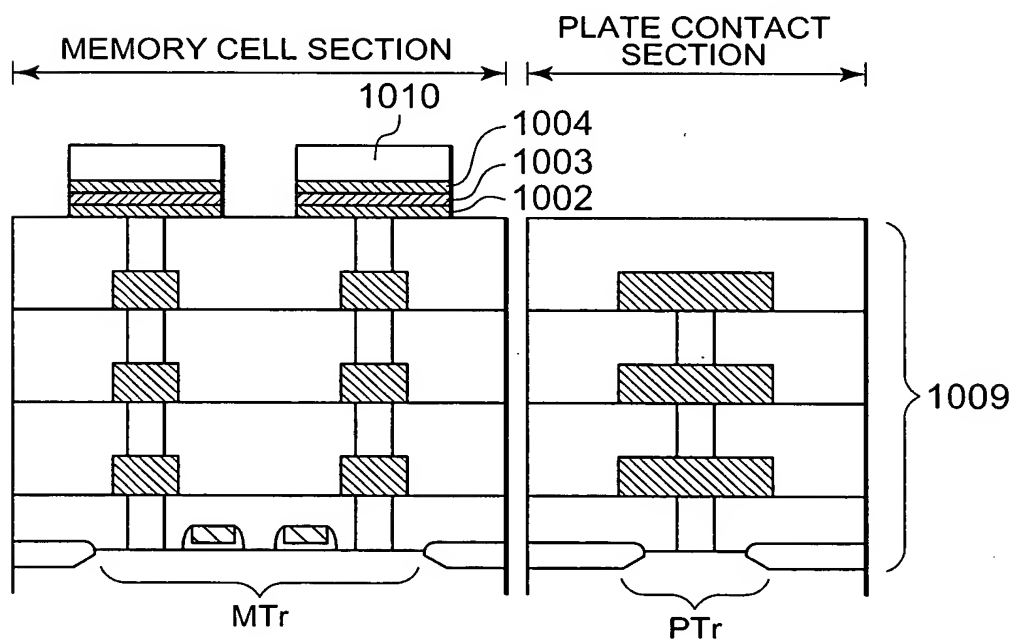


FIG. 10 (PRIOR ART)



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FIG. 11 (PRIOR ART)

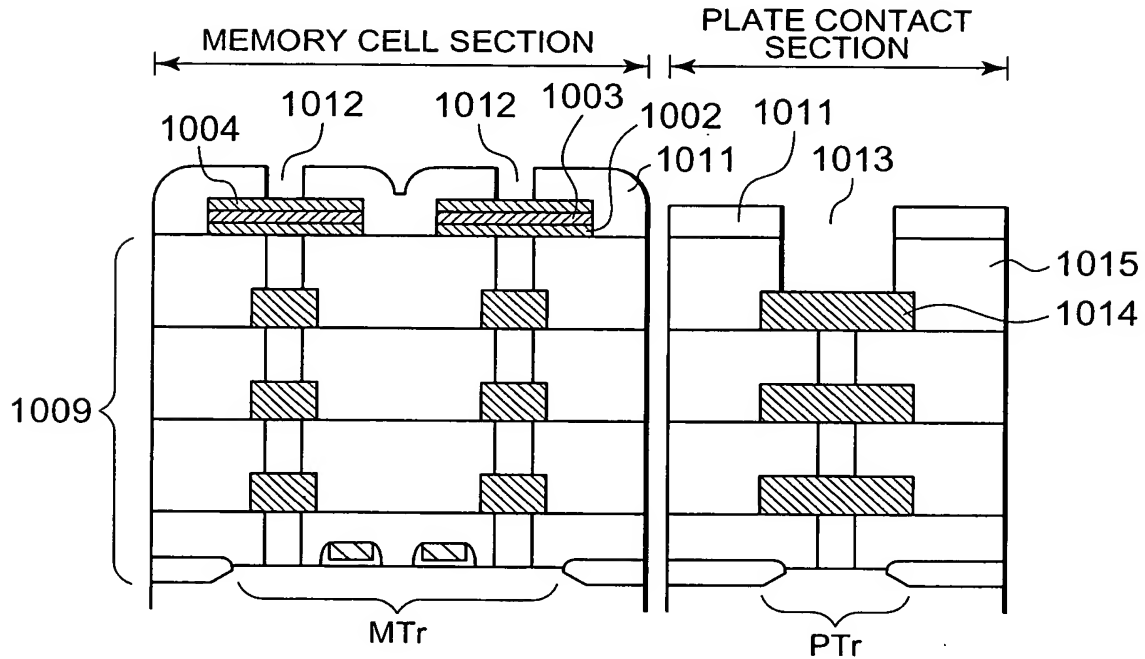
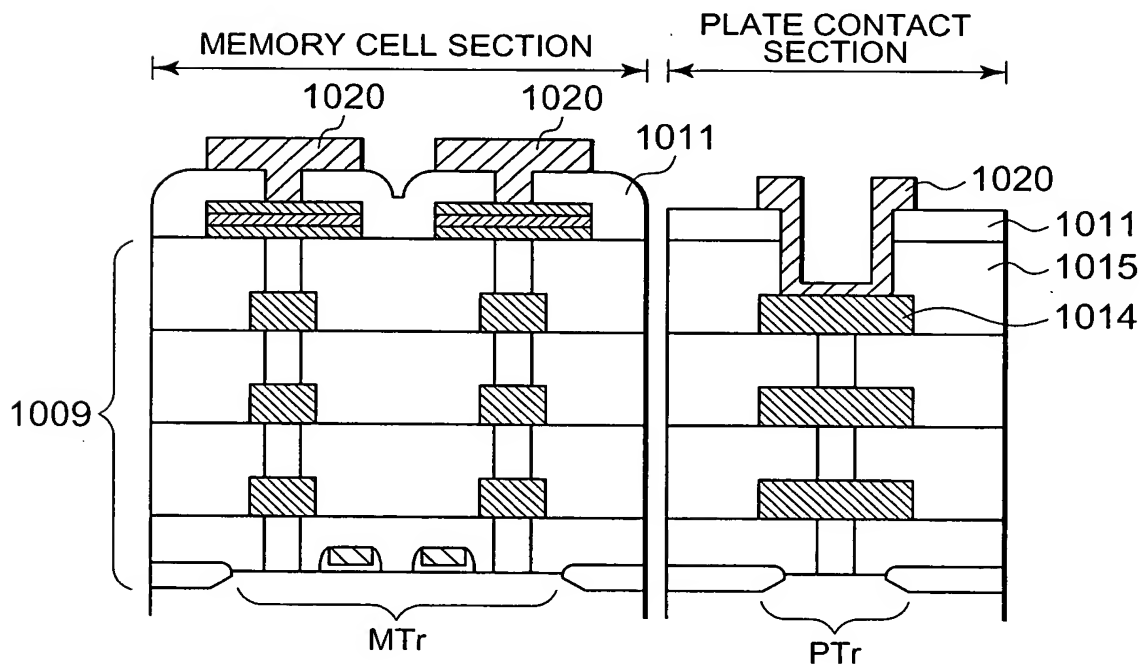


FIG. 12 (PRIOR ART)



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FIG. 13 (PRIOR ART)

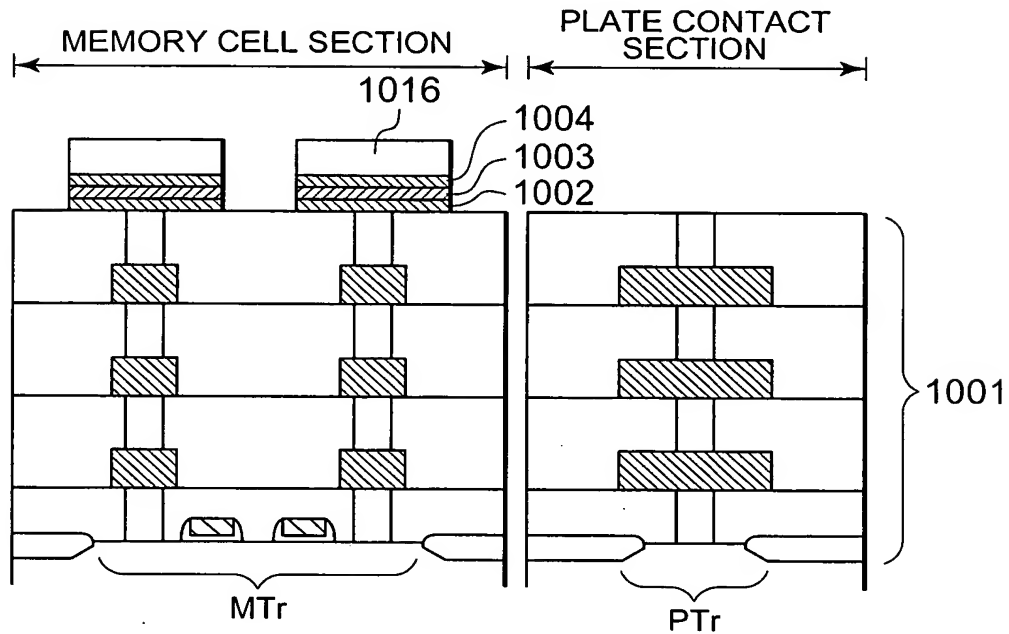
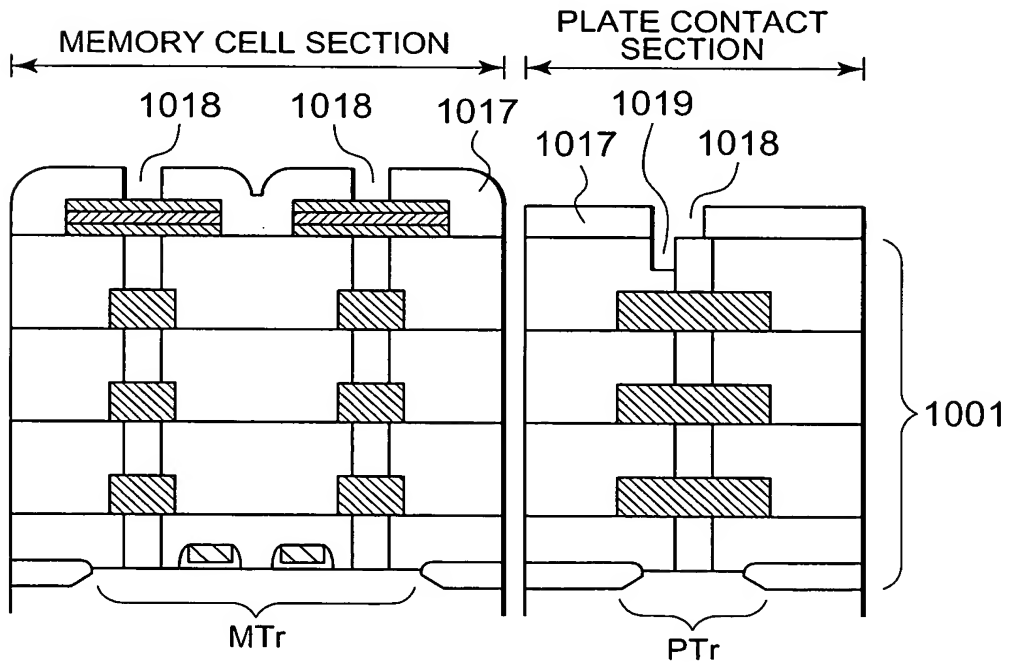


FIG. 14 (PRIOR ART)



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FIG. 15

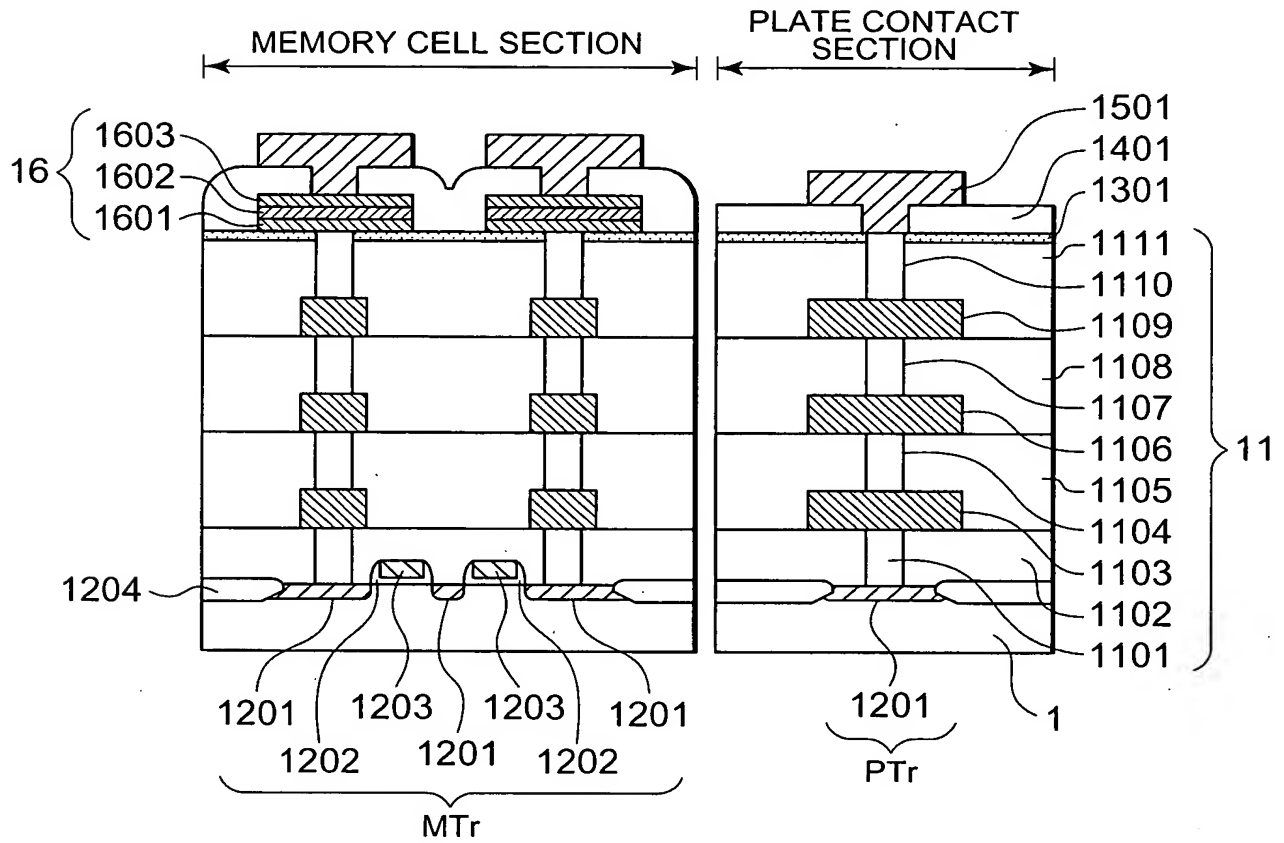




FIG. 1 is a cross-sectional view of a semiconductor device, divided into two main sections: a MEMORY CELL SECTION on the left and a PLATE CONTACT SECTION on the right. The device is built on a substrate 1201. In the MEMORY CELL SECTION, a central vertical channel 1203 is flanked by two vertical structures 1101. Each 1101 contains a square region 1103. Horizontal structures 1103 are positioned above and below the vertical structures. In the PLATE CONTACT SECTION, a vertical structure 1101 contains two square regions 1103. A horizontal structure 1203 is located between the two vertical structures 1101. A dashed line A-A indicates a cross-section through the memory cell section, and a dashed line B-B indicates a cross-section through the plate contact section.

FIG. 1 is a cross-sectional view of a semiconductor device. The device is divided into two main sections: a MEMORY CELL SECTION and a PLATE CONTACT SECTION. The MEMORY CELL SECTION contains two memory cells (1110) separated by a partition (1201). Each memory cell has a plate (1501) and a word line (16). The PLATE CONTACT SECTION contains a plate (1201) and a word line (1501). A dashed line A-A indicates the plane for FIG. 2, and a dashed line B-B indicates the plane for FIG. 3.

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FIG. 18

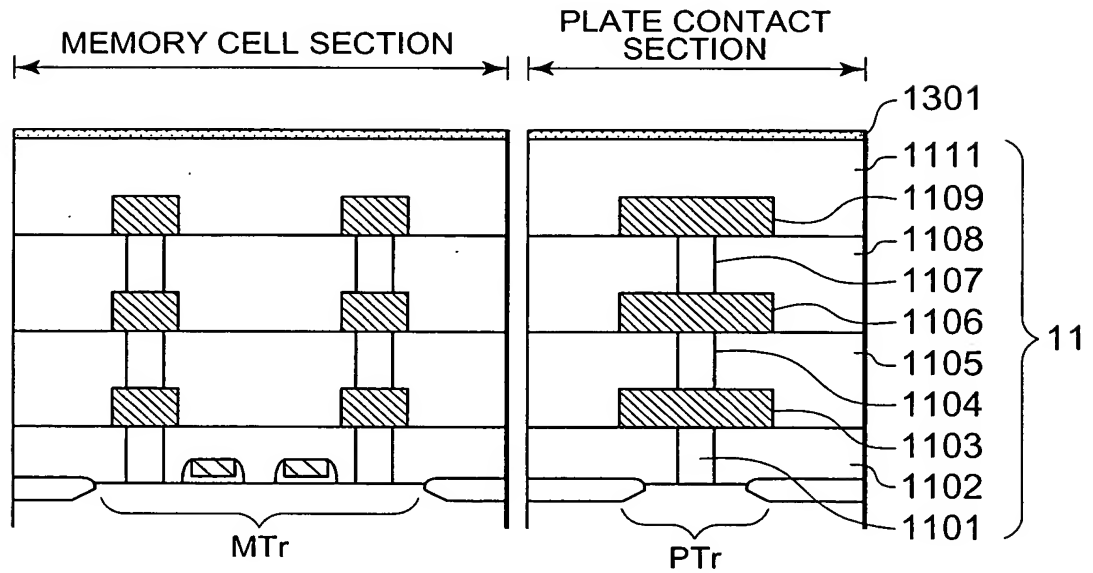
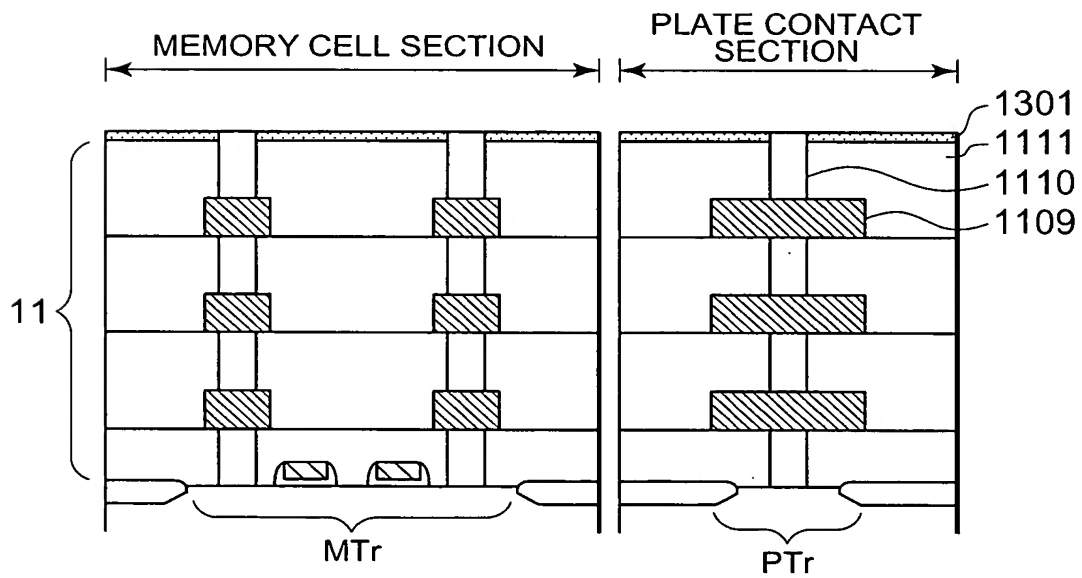


FIG. 19



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FIG. 20

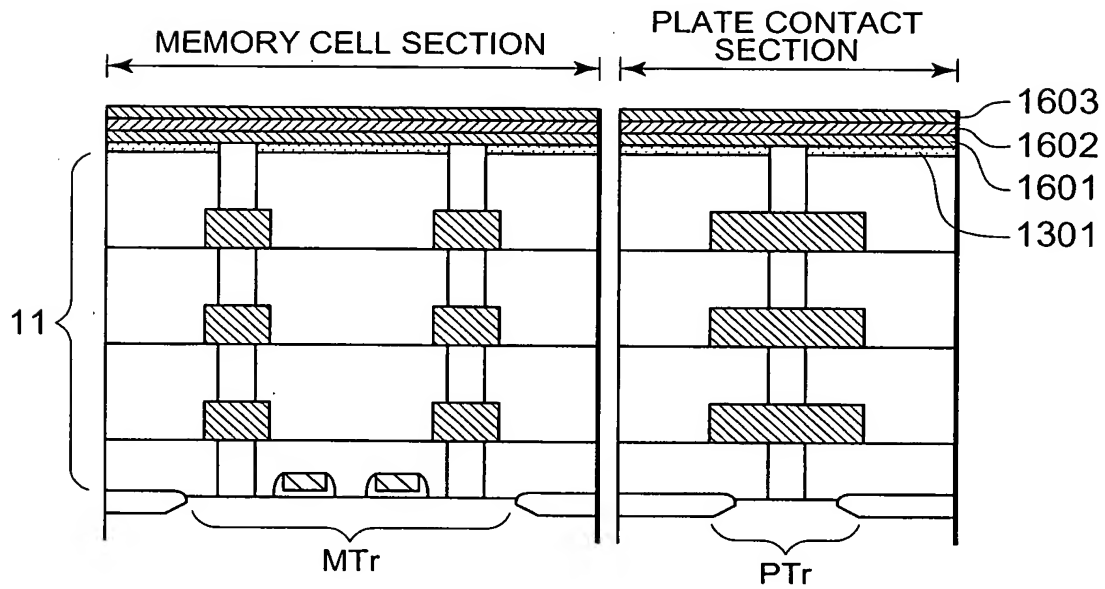
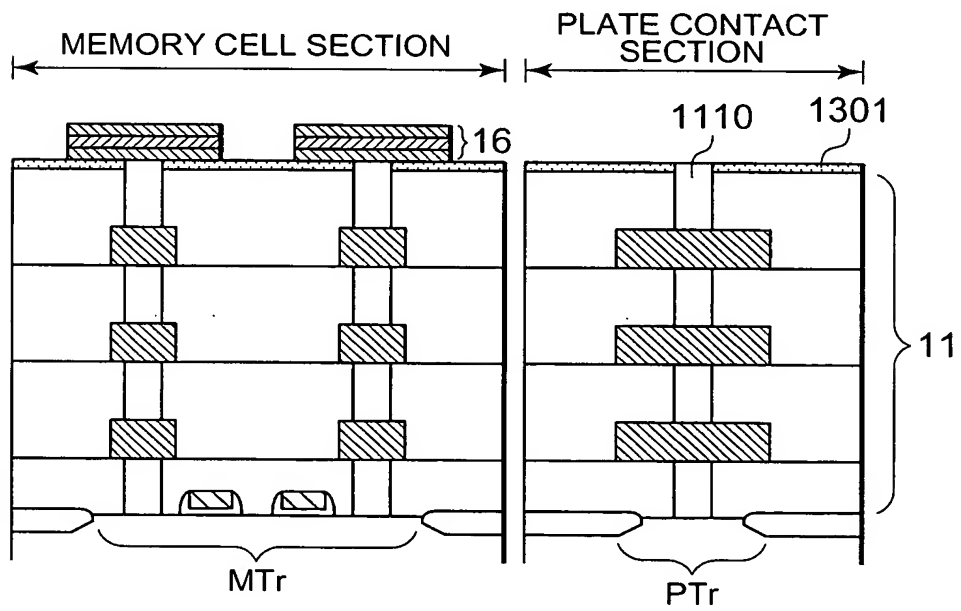


FIG. 21



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FIG. 22

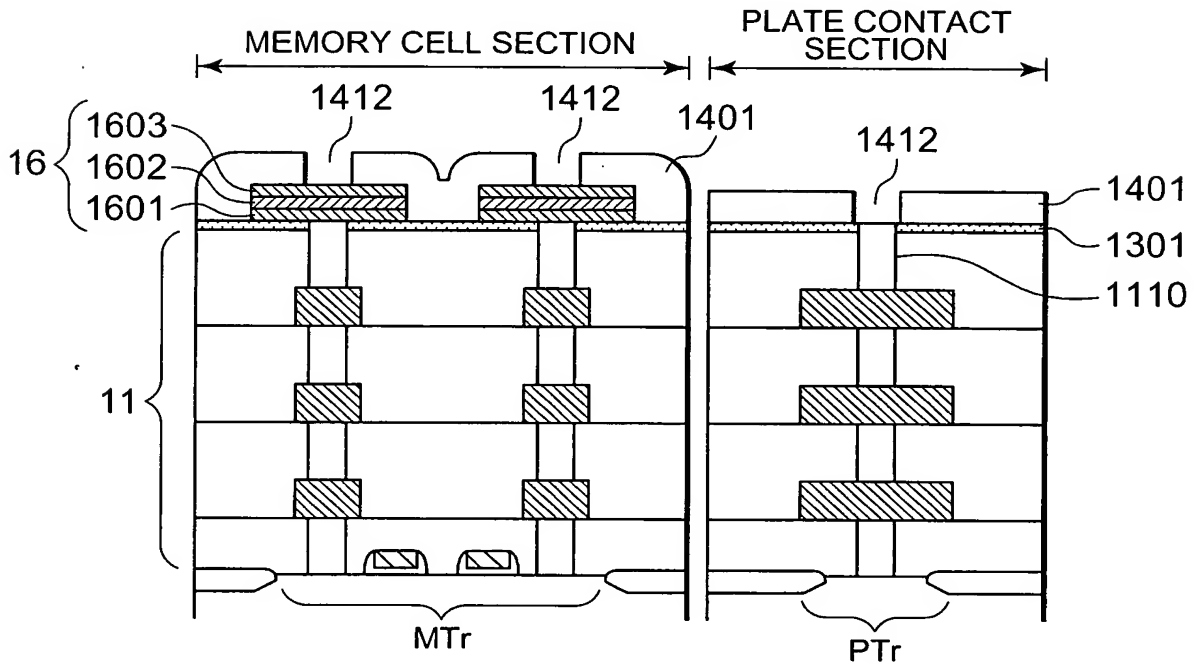
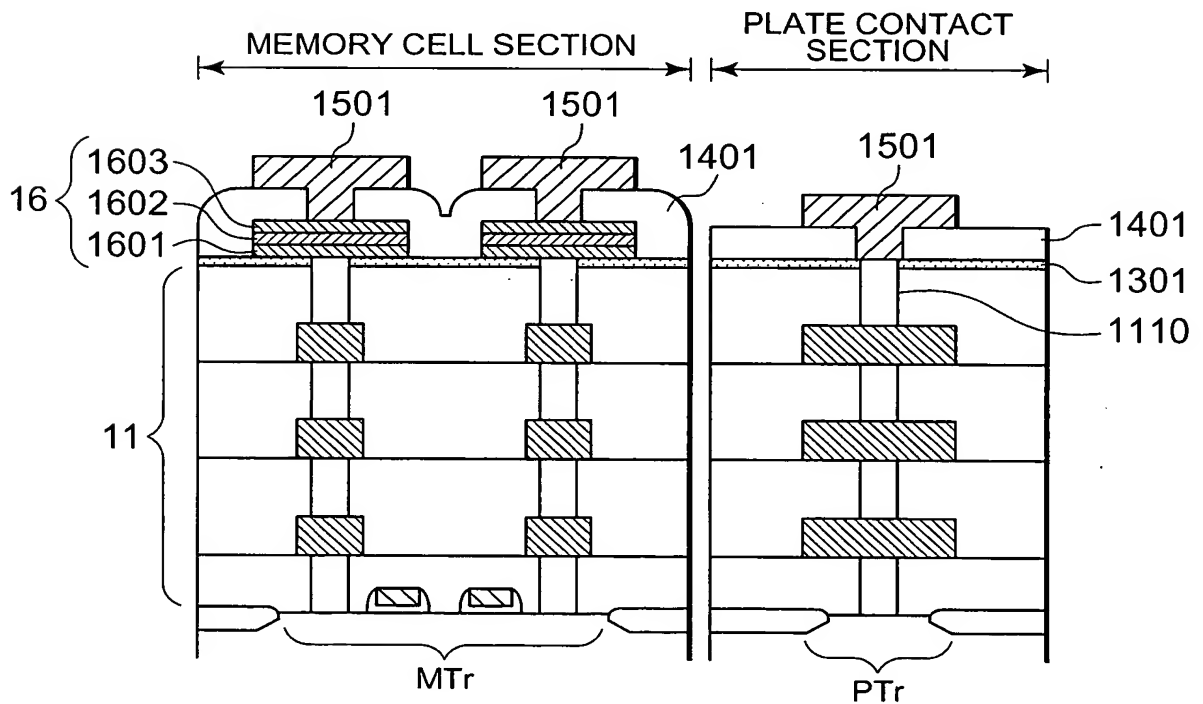


FIG. 23



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FIG. 24

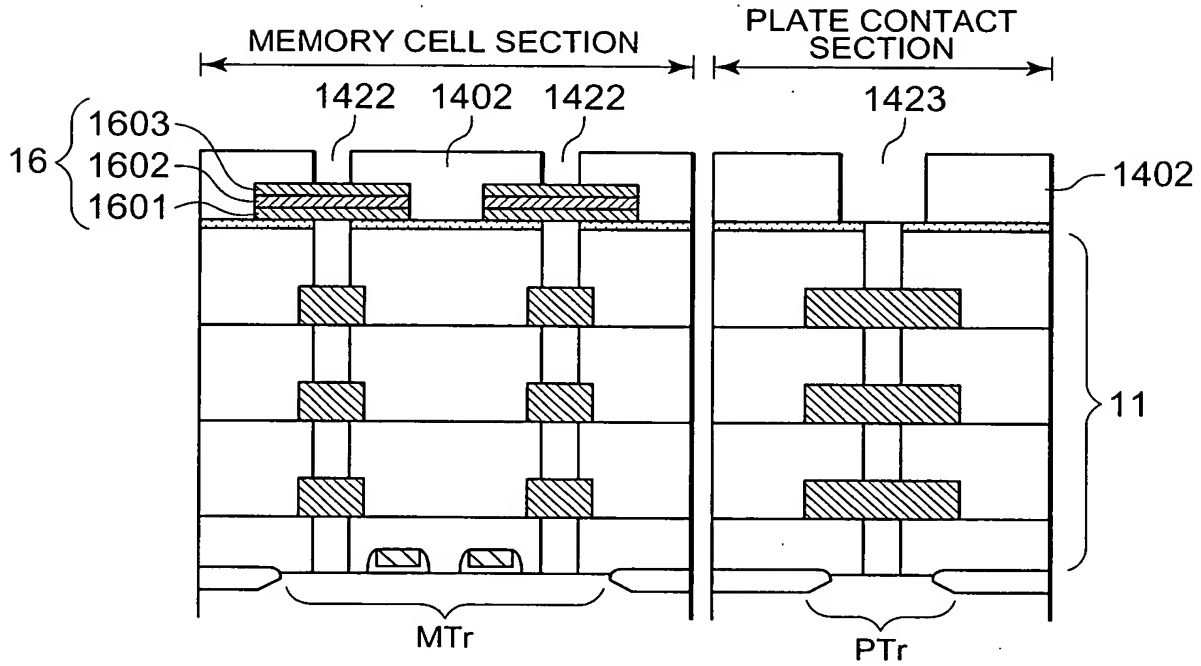
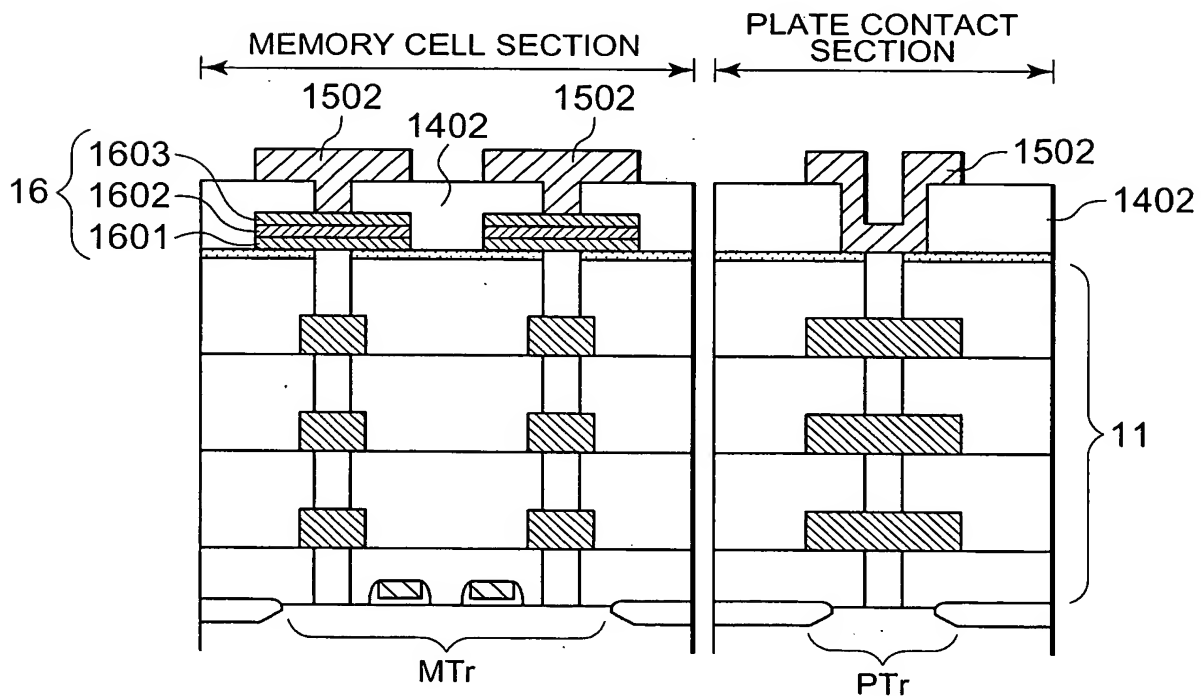


FIG. 25



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FIG. 26

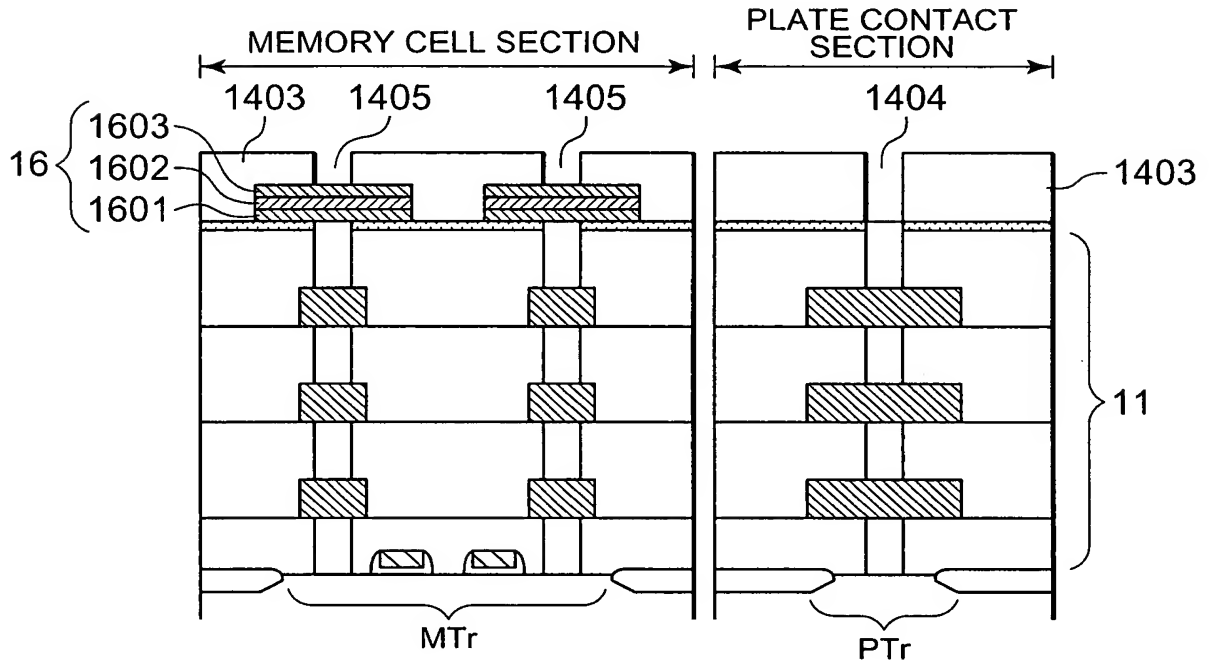


FIG. 27

